

Agile Operations

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The new server – a fable

Alice requests a new server

Bob submits a ticket to Charlie

Charlie speaks to Diana, the supplier

Diana has some questions

so she asks Charlie, who asks Bob, who goes back to Alice

You wait... time passes...

Diana provides a quote

- Charlie passes the quote to Bob
- Bob emails Alice with the quote

It's a big quote, so Charlie emails Eric, for approval

Eric doesn't know anything about the server.

Eric calls Bob, and asks why Alice needs this server

How should I know? replies Bob. I'll go ask

Bob spends the rest of the day relaying messages

except Alice is on vacation

The new server – a fable

Eric approves the purchase

You wait... time passes...

Alice asks Bob where her server is

Bob checks. Turns out it's waiting for Alice to sign off

What do you mean sign off? says Alice. I asked for it in the first place

Alice (sigh) signs off the purchase

Charlie orders the hardware from Diana

You wait... time passes...

The hardware arrives. Bob submits a ticket to Fiona in the data centre

Bob submits a ticket to Gary in the OS team

Bob submits a ticket to Helen in the networking team

You wait... time passes...

Bob sighs

Alice cries...

I. Would. Like. A. New. Server.

Please!

What's wrong with this picture?

Time-consuming *hand-offs*

Error-prone *manual* procedures

We're baking waste into the process

Waste comes in flavours

Transportation

Inventory

Movement

Waiting

Overproduction

Overwork

Defects

Waste comes in flavours

Transportation

Inventory

Movement

Waiting

Overproduction

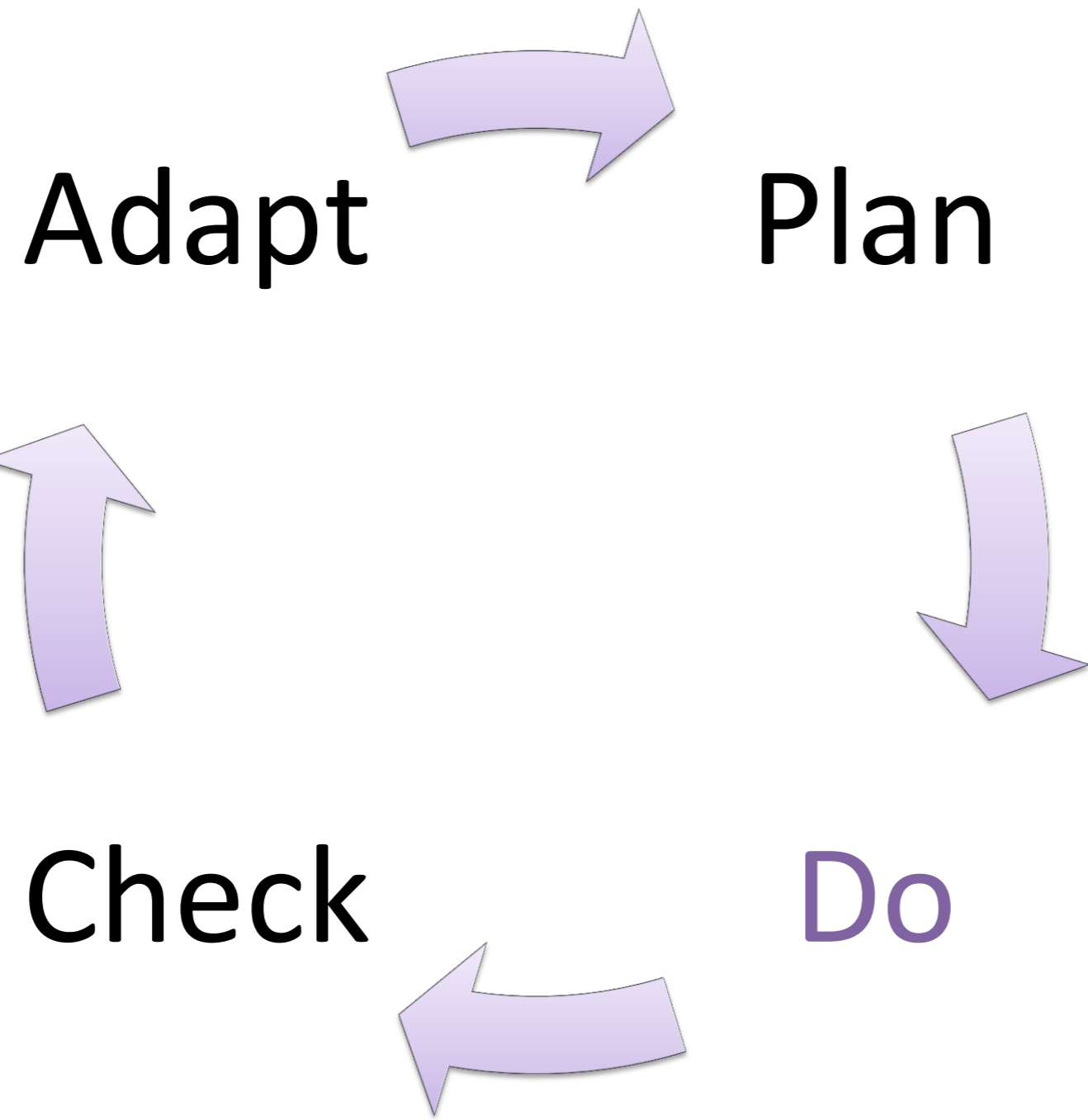
Overwork

Defects

Agile Operations

Integrating
Lean Operations
and
DevOps

First, identify your goal



Adapt

Plan

Check

Do

Adapt

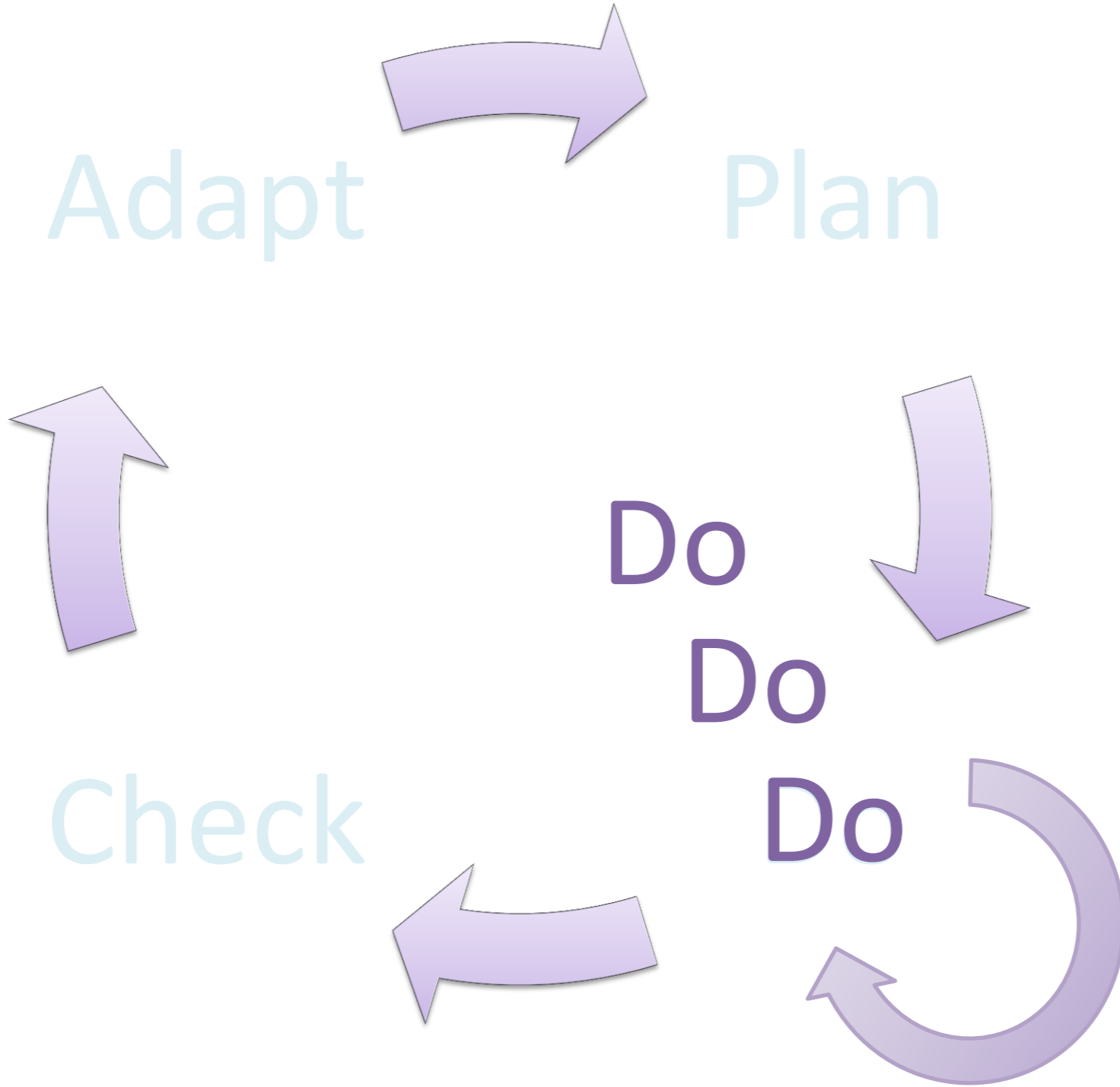
Plan

Do

Do

Do

Check



Monitoring in one line

```
while :; do curl -f -s $SERVER -o /dev/null \  
  || mailx -s "$SERVER is dead!" \  
  monitoring@drw.com; sleep 10; done
```

: is the null command

```
% echo $SERVER
```

```
% : ${SERVER:=localhost}
```

```
% echo $SERVER
```

```
localhost
```

Don't forget about **cron!**

Server provisioning

First **fix** the process

Automation **reinforces** process

Celebrate successes!

All your /etc are belong to us

Start with the tin

Use git branches

Optimise for repeatability

Test-driven networking

Version control network settings

Create sentinels

Automate changes

Start where *you* are

The very *next* system change you make

```
git init; git add .; git commit
```

or

```
hg init; hg add .; hg commit
```

...and relax

Questions?

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